MTCA/SMS Integration Issue
Teresa Michelsen comments
Submitted May 16, 2010

Permanence - I understand the need to include this based on the MTCA law. However, it is highly treatment-focused. In all the years I've worked with sediment cleanup, treatment has seldom turned out to be practicable, with rare exceptions. While I understand that changes to this terminology may not be possible, something should probably be put in the SAPA or other sediment guidance to explain exactly how this would apply to a typical set of sediment remedies. I would hope it would minimize the use of institutional controls, for example, as well as emphasizing source control.

Bioassay – This new one seems really cryptic. I've read it several times and am still not entirely sure what it includes or excludes. I actually vastly prefer the existing definition, with potentially a minor change, such as "a test procedure that measures the response of living plants, animals, or tissues to sediments in the field or laboratory." I don't think benthic community analyses should be included. The literature and common understanding of chemistry, bioassays, and benthic community as three separate measurement procedures (triad) needs to be preserved, or everyone will get confused.

Biological Toxicity Test – This is what I (and I expect most everyone in the community) thinks of as a bioassay. I would stick to plain language and widely used terminology. I wouldn't include this at all. "Appropriate biological tests" as is seems like it should cover both bioassays and benthic community analyses, being more general.

Chronic Bioassay – Probably ought to stick to the first line here. Adding types of effects may confuse the matter, acute and chronic tests really need to be kept separate from acute and sublethal endpoints. Simple definitions of both should probably be in the rule. And again, I don't think that benthic community analyses are "chronic effects" or endpoints, since in their basic form they are just enumerations that are then evaluated in a variety of statistical ways – but they are chronic biological tests in the sense of "appropriate biological tests" above.

Acute Bioassay – again would recommend sticking to the first sentence. In both cases, replace "which" with "that".

Sediment – Recommend against including any arbitrary cutoff time. Just leave that phrase out.

Contaminated Sediment – Recommend adding to the end of the sentence, "including narrative, biological, and chemical criteria." I see here that you're defining contaminated sediments as only surface sediments, rather than the current definition that includes all sediments. I think that's a mistake – there may be cases where excavation or dredging in required, or natural or artificial erosion or sloughing may occur, and this would lead to arguments that that subsurface sediment need not be addressed. Use surface sediments as a point of compliance or some other place but don't explicitly include it in the definition of what's contaminated.

Active Cleanup Action – Same concerns Pete expressed. This is highly unclear, especially without the definition of cleanup standard.

Biologically Active Zone – Replace the term "majority" with the actual definition originally used (95% of the benthic organisms reside in this layer). Make clear that the 10 cm is the default only for marine sediments. Biologically active zones should be delimited on a site-specific basis using the natural condition of the surrounding area, NOT the depth to the anoxic zone at the site, if the anoxic zone has been impacted by the site contaminants. Somehow this needs to be rephrased accordingly, without making it complicated (or left out – people can always do site-specific analyses).

The proposed rule terms are not quite parallel. I think the following would be closer:

Cleanup Study Plan – RI/FS Work Plan (+ SAP/QAPP/HSP)
Cleanup Study – RI/FS
Cleanup Study Report – RI/FS Report
Cleanup Action Decision (WAC 173-204-580) – Cleanup Action Plan